West Lake Landfill - MDNR SAP draft comments
Muenks, Shawn
to:
Dan Gravatt
06/11/2012 05:01 PM
Cc:
"Doster, Branden"
Hide Details
From: "Muenks, Shawn" <shawn.muenks@dnr.mo.gov>

To: Dan Gravatt/R7/USEPA/US@EPA

Cc: "Doster, Branden" <branden.doster@dnr.mo.gov>

History: This message has been replied to.

1 Attachment

20120611 WLL GW SAP comments letter-MDNR.doc

Dan,

Attached are our draft comments on the sampling and analysis plan for additional groundwater sampling. Let me know if you have any questions or would like to discuss prior to transmittal to Paul Rosasco.

Shawn Muenks, P.E.
Missouri Department of Natural Resources
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June 11, 2012

Mr. Paul Rosasco, P.E.
Engineering Management Support, Inc.
7220 West Jefferson Avenue, Suite 406
Lakewood, CO 80235

RE: Comments on Sampling and Analysis Plan – Additional Groundwater Monitoring
West Lake Landfill Operable Unit 1, Bridgeton, Missouri

Dear Mr. Rosasco:

The Missouri Department of Natural Resources has completed its review of the above referenced document prepared by Engineering Management Support Inc. (EMSI) and is transmitting the enclosed comments. These comments have been compiled by the department's Hazardous Waste Program, Federal Facilities Section with assistance from other programs within the department and State agencies.

Thank you for giving us the opportunity to review and comment on this document. If you have any questions pertaining to these comments please contact me by phone at (573)751-3107 or by written correspondence at P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

HAZARDOUS WASTE PROGRAM

Shawn Muenks, P.E.
Federal Facilities Section

c: Mr. Dan Gravatt, U.S. Environmental Protection Agency

MISSOURI DEPARTMENT OF NATURAL RESOURCES

Comments on the Sampling and Analysis Plan – Additional Groundwater Monitoring

GENERAL COMMENTS:

1.) **Split Sampling**
The Department requests the opportunity to be allowed to collect split samples during this sampling event. Please include dialogue to allow such sampling.

2.) **Investigative Derived Waste (IDW)**
What will be done with IDW, including purge water?

3.) **Quality Assurance Project Plan (QAPP) and Standard Operating Procedures (SOPs)**
What QAPP and SOPs will be used for sample collection and analyses?

SPECIFIC COMMENTS:

4.) Monitoring Locations, second paragraph, page 1. The first sentence states, "EMSI retained Herst and Associates, Inc. (Herst) to conduct a site inspection and well inventory to ascertain the current number of wells at the site, conditions affecting access to the wells, the condition of surface portions (protective casing, locks, etc.) of the wells, and the depth to water, total depth and downhole conditions as best as could be determined during collection of depth to water and total depth measurements." When was this site inspection and well inventory conducted? What were the results of all the conditions? Table 1 only lists general conditions.

5.) Monitoring Locations, second paragraph, page 2. The second sentence states, "The inspection did not include checking whether a pump or other sampling device could be lowered into the wells." Are there plans to do this for all existing wells at some time? The Department suggests using a down-hole camera for wells that are in question.

6.) Monitoring Locations, third paragraph, page 2. The second sentence states, "Figure 1 displays the locations of the various monitoring wells that have historically were present at the West Lake Landfill." There appears to be a typographic error in this sentence associated with the word "were".

7.) Monitoring Locations, third paragraph, page 2. The fourth sentence states," Based on the results of the well inspection and review of information obtained during prior sampling activities, it was determined that 35 wells have been abandoned, destroyed, are damaged in a manner that would prevent collection of groundwater samples, or were previously reported as missing." Please be aware that Missouri Well Construction Rules call for all abandoned monitoring wells to be plugged and properly registered. Abandoned wells are defined as those in such a state of disrepair that continued use for the purpose of obtaining groundwater is impractical and the well has not been in use for a period of two (2) years or more.

8.) Monitoring Locations, third paragraph, page 2. The last sentence states, "The status of the

remaining 12 wells could not be determined because the wells could not be located or their locations could not be accessed due to heavy vegetation growth or fencing that restricted access to offsite properties." Were the offsite property owners contacted for access?

9.) Monitoring Locations, fourth paragraph, page 2. The third sentence states, "Prior to conducting the groundwater sampling effort, vegetation must be cleared to allow for access to these wells." Will this include clearing access to those wells that were unable to be reached during the site inspection and well inventory? Also, please describe the type of clearing to be conducted.

10.) Sample Collection, third paragraph, page 3. The first sentence states, "Field parameters including, at a minimum, temperature, pH, and specific conductance, will be monitored using an in-line flow-through chamber during well purging at a minimum of intervals equivalent to one-half of a well casing volume." It is unclear what is meant here. Will one-half of a well casing volume be purged before continuous field parameters are recorded or will field parameters be recorded every one-half well casing volume?

11.) Sample Collection, third paragraph, page 3. The second sentence states, "Well purging will continue until three successive sets of field parameter readings indicate stable water quality; specifically three successive temperature readings within 1 degree C, three successive pH readings within 0.2 pH unit, and three successive specific conductance readings within 10% of each other." Why did the parameter stability range increase from the 2004 groundwater sampling and analysis plan for temperature and pH?

12.) Sample Collection, third paragraph, page 3. The fifth sentence states, "In the event that the water level in a well does not recover sufficiently within 24 hours, a sample will not be collected from that well." Can such a well be revisited later during the sampling event to allow more time to recover? The SAP anticipates three to four weeks to collect groundwater samples.

13.) Laboratory Analyses, first paragraph, page 3. Please provide information on where the EPA Target Analyte Lists (TALs) can be located. Are these available on the EPA website?

14.) Data Evaluation and Management, second paragraph, page 5. The last sentence states, "A brief report describing the sampling activities will be prepared and will include the analytical data summary tables described above, the well sampling and purging forms, chain of custody reports, the analytical laboratory reports, and the data validation reports." The Department suggests including a comparative analyses of the results to sampling data from 1995, 1996, 1997, and 2004 in this report or subsequent report.

15.) Anticipated Schedule of Activities, first paragraph, page 5. The third sentence states, "Allowing for scheduling and mobilization of a landscaping service crew, it is anticipated that it will take one to two weeks to complete the brush clearing activities." Will the landscaping service crew be qualified to work on Operable Unit-1 (i.e. dosimetry monitoring and necessary safety training - HAZWOPER)? Also, what Health and Safety Plan will be used for this sampling event?

16.) **Table 1** – The table lists such conditions as "casing obstructed". Will actions be taken to try to repair or open wells in order to obtain a sample? In particular, previous correspondence revealed that well D-14 was such an "obstructed" well. Again, the Department recommends using a down-hole camera to inspect well integrity and determine possibilities for removing obstructions.